

Notice of Allowability

Application No.

10/823,737

Examiner

Pho M. Luu

Applicant(s)

TANAKA ET AL.

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-51.
3. ☒ The drawings filed on 14 April 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 07/24/05.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 04/14/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other Search History.

Notice of Allowability

RICHARD ELMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In abstract: Line 1, delete "Disclosed is".

Line 2, replace "comprising" with --including--.

2. Claims 1-51 are pending in the application.
3. This office action acknowledges receipt of the following items from the Applicant:
The Specification, Claims, Abstract, Drawing and Oath or Declaration filed on 14 April 2004.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

5. Acknowledgment is made of applicant's Information Disclosure Statement (IDS) Form PTO-1449, filed 14 April 2004. The information disclosed therein was considered.

Drawings

6. Figure 20 should be designated by a legend such as **--Prior Art--** because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Allowance

7. Claims 1-51 is allowance.

The following is an examiner's statement of reasons for allowance:

There is no teaching or suggestion in the prior art to: "a control circuit include a first read mode booted via a first bootstrap to read data from the non-volatile semiconductor cells for continuously outputting (N + M) – byte data via the interface and a second read mode booted via a second bootstrap to read data from the non-volatile semiconductor memory cells for continuously outputting k-byte data via the interface" as claimed in the independent claim 1, independent claim 2, independent claim 8, and independent claim 14; or

"a control circuit include a first operation mode of making access with respect to one of the memory cell array via a first bootstrap to process (N + M) – byte data" as claimed in the independent claim 21; or

"a control circuit include a first read mode for reading data from the non-volatile semiconductor memory cells via a first bootstrap booted by a signal inputted to the

interface for continuously outputting data at the maximum of $(N + M)$ – byte via the interface” as claimed in the independent claim 22 and independent claim 40; or

“a power supply voltage detection circuit detecting a power supply voltage and outputting a boot signal to the control circuit” as claimed in the independent claim 26; or

“a second read mode for reading the data from the non-volatile semiconductor memory cells via a second bootstrap so as to correct an error of the data read by the error correction circuit” as claimed in the independent claim 45; or

“a second read mode for reading the data from the non-volatile semiconductor memory cells via a second bootstrap wherein part of signals inputted to the interface is invalidated during the second read mode and data read in the second read mode is a program for booting the electronic apparatus” as claimed in the independent claim 49.

8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tanaka et al. (US. 5,901,152) disclosed the control circuit including card input/output interface, data memory circuit and flash memory interface.

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10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Pho M. Luu whose telephone number is 571.272.1876. The examiner can normally be reached on M-F 8:00AM – 5:00PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Richard Elms, can be reached on 571.272.1869. The official fax number for the organization where this application or proceeding is assigned is 703.872.9306 for all official communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PML
24 July 2005.